

FIG. 1

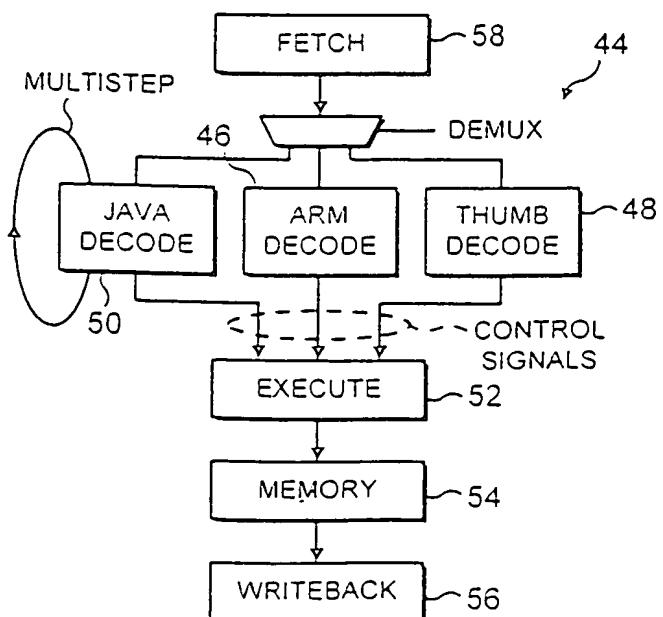


FIG. 2

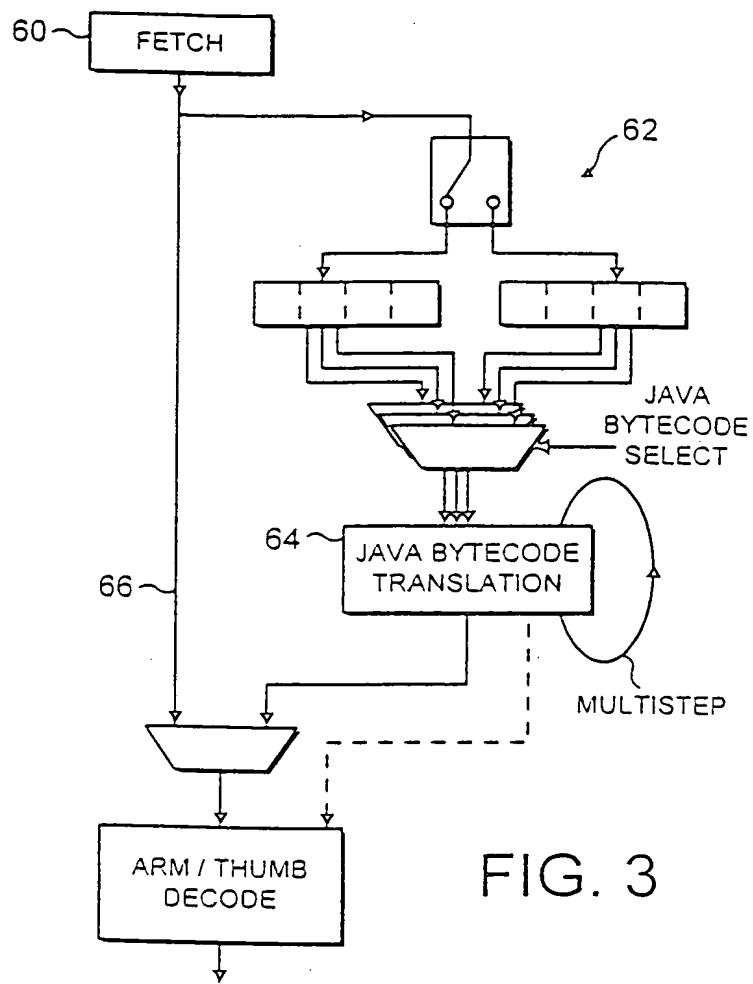


FIG. 3

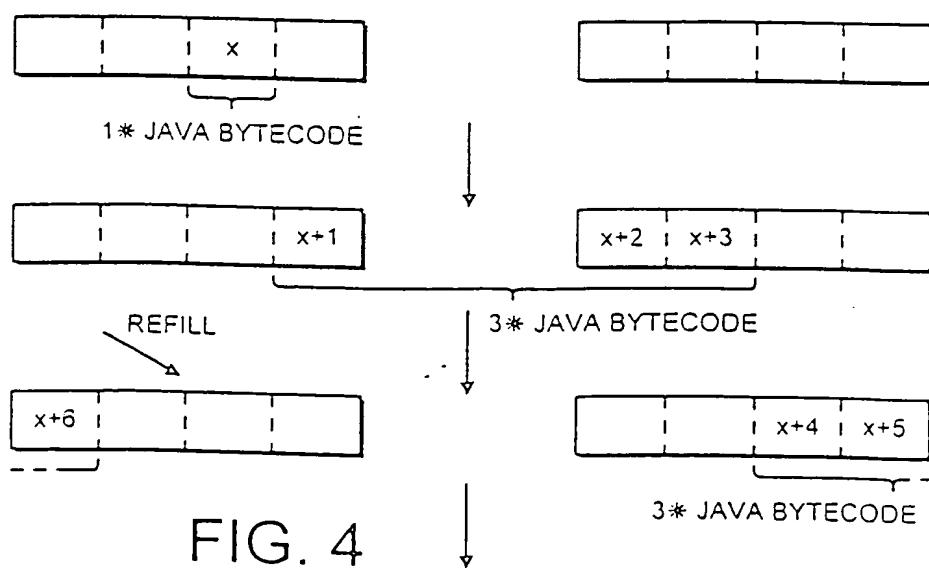


FIG. 4

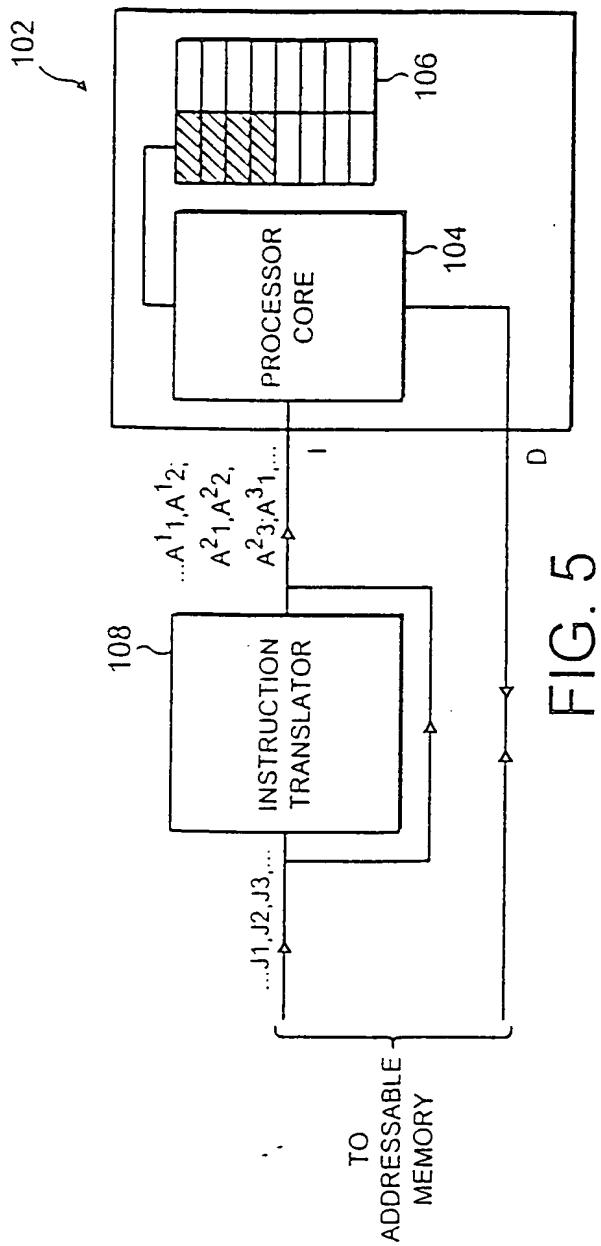


FIG. 5



JAVA INSTRUCTION		iadd (RF=2, RF>0)	iadd (RF=2, RF>1)	iadd (SA=-1)
ARM INSTRUCTION(S)		$\nearrow \text{LDR } R0[\text{RStack}, \#-4]!$ / (POP)	$\text{LDR } R3[\text{RStack}, \#-4]!$ / (POP)	ADD R3, R3, R0 ↴
STATE		00000	00100	01000
R0	E	SOA TOS	SOA TOS	E
R1	E	E	E	E
R2	E	E	E	E
R3	E	E	SOB TOS-1	(SOA+SOB) TOS
<hr/>				
JAVA INSTRUCTION		/ load <sup>1</sup> / (RF=0, RE>2)	/ load <sup>2</sup> / (RF=0, RE>2)	/ load <sup>2</sup> / (RF=0, RE=2)
ARM INSTRUCTIONS		$\nearrow \text{LDR } R1,[\text{Rvars}, \#4]$ / $\text{LDR } R0,[\text{Rvars}, \#0] \searrow$	$\nearrow \text{STR } R3[\text{RStack}, \#-4]$ / (PUSH)	$\nearrow \text{LDR } R3,[\text{Rvars}, \#4] \nearrow$ / $\text{LDR } R2,[\text{Rvars}, \#0] \searrow$
STATE		00000	00100	01000
R0	E	SOC TOS-1	SOC TOS-1	SOC TOS-3
R1	E	SOD TOS	SOD TOS	SOD TOS-2
R2	E	E	E	SOE TOS-1
R3	(SOA+SOB) TOS	(SOA+SOB) TOS	E	SOF TOS

FIG. 6

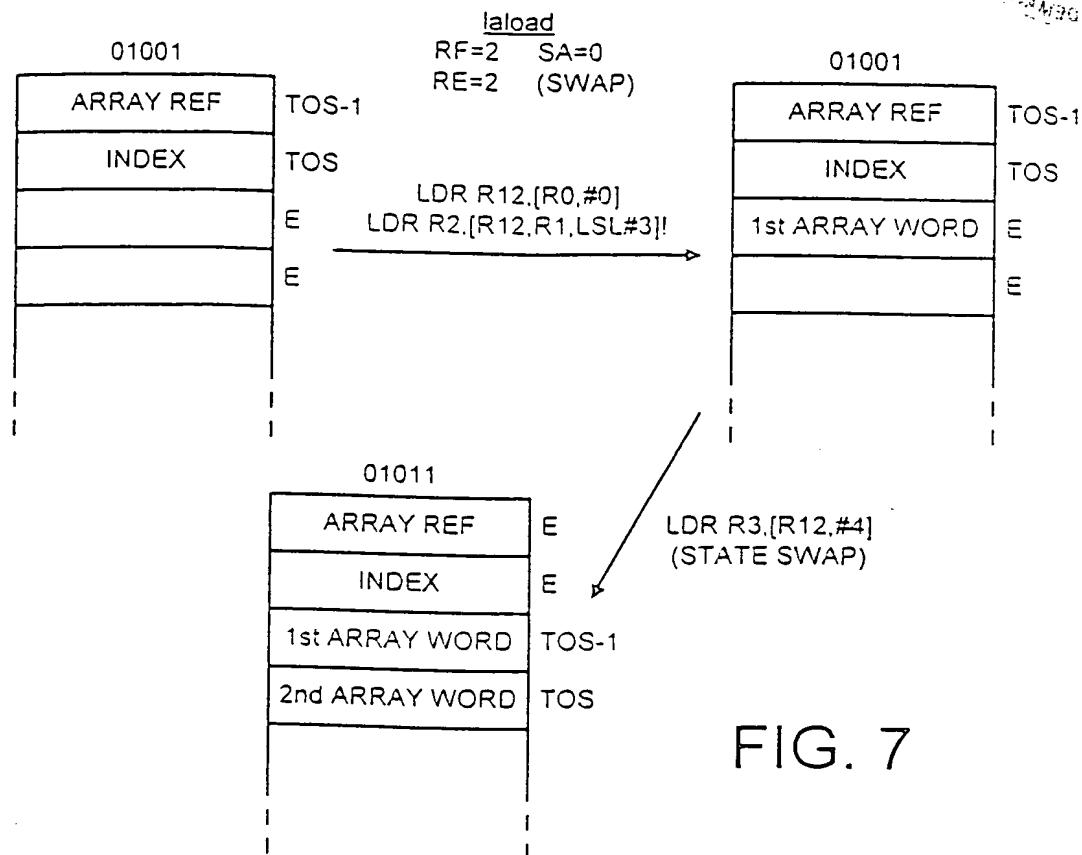


FIG. 7

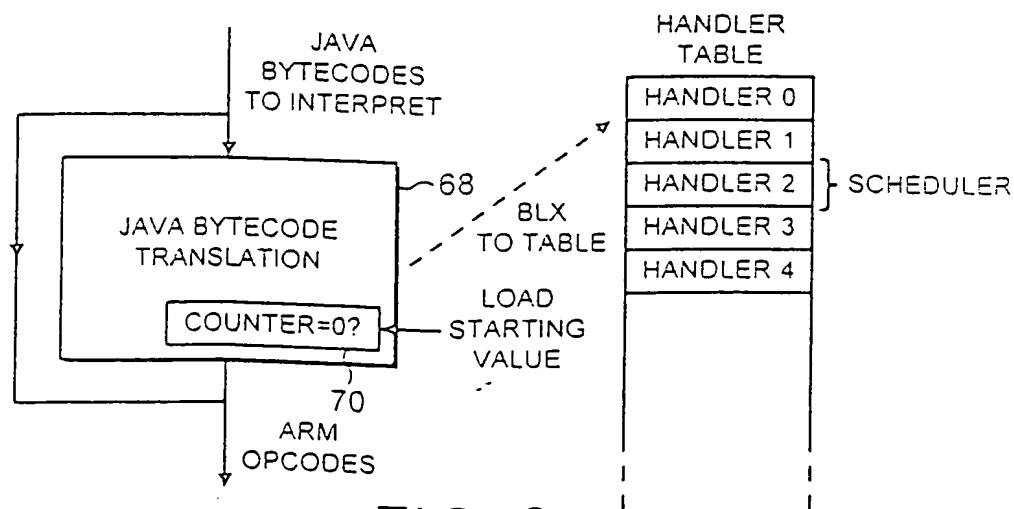


FIG. 9

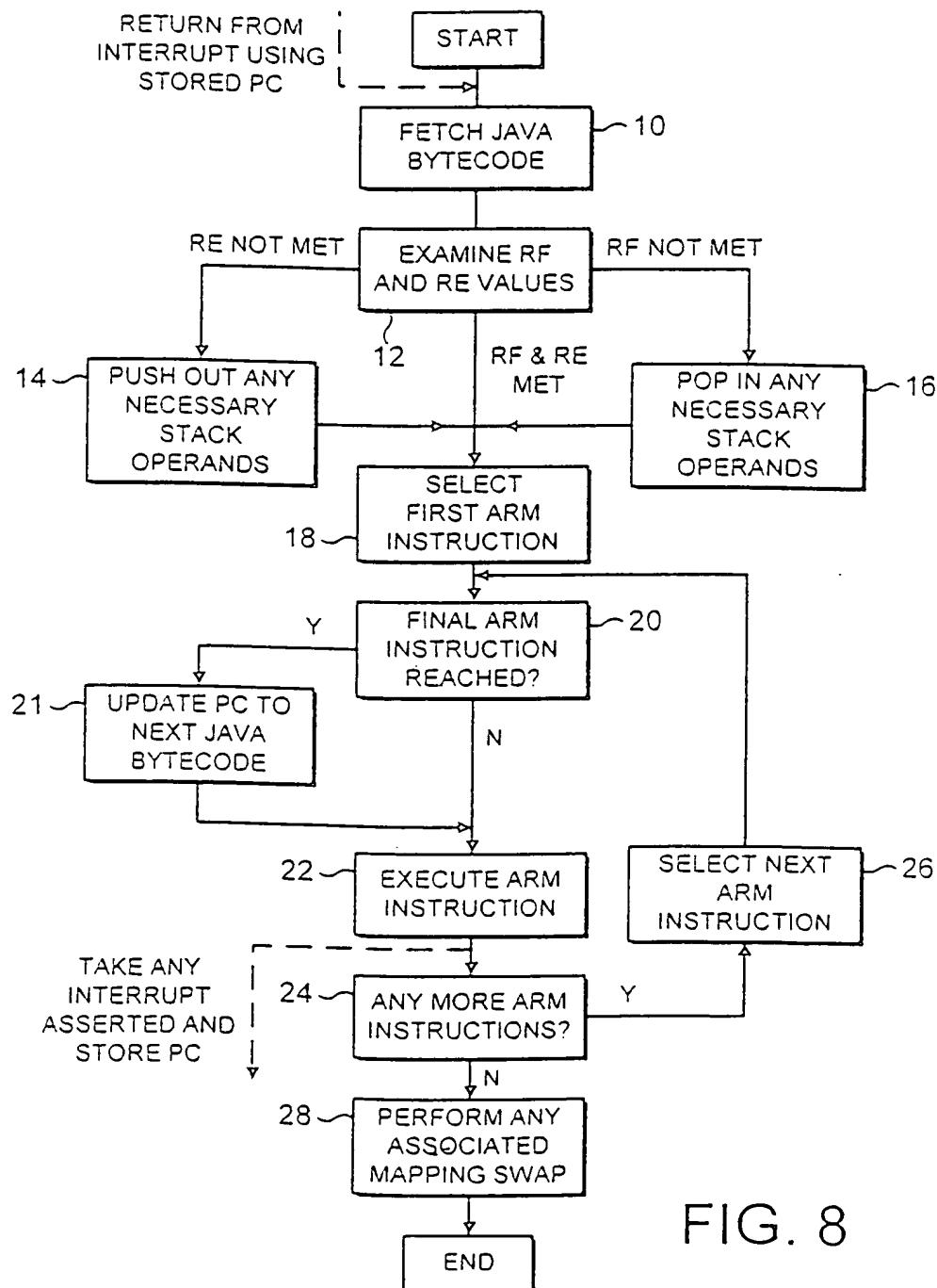


FIG. 8

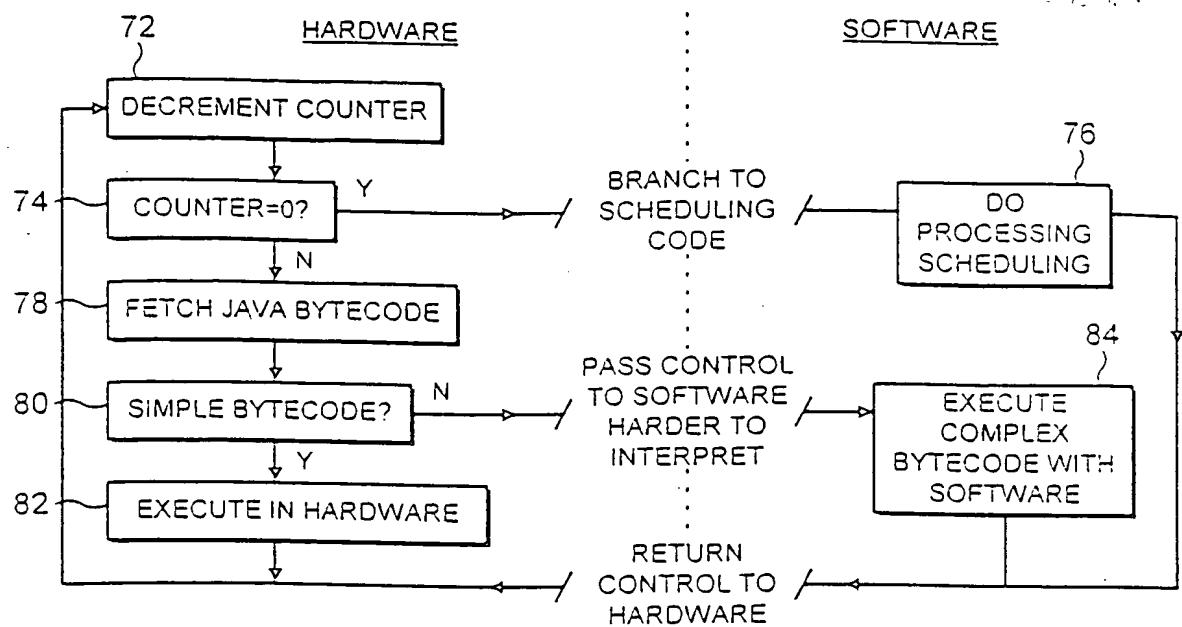


FIG. 10

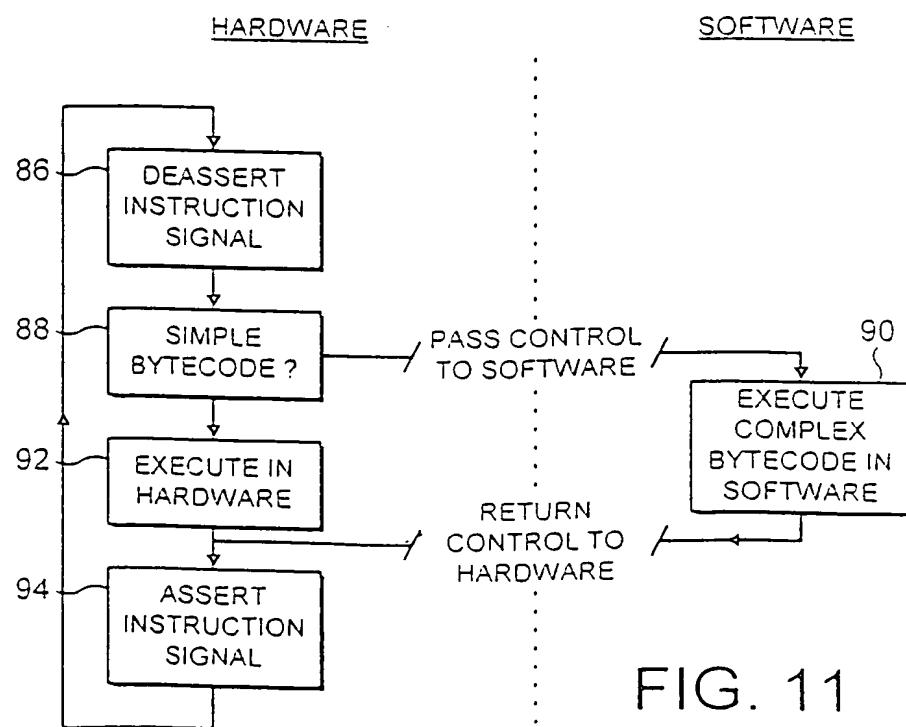


FIG. 11

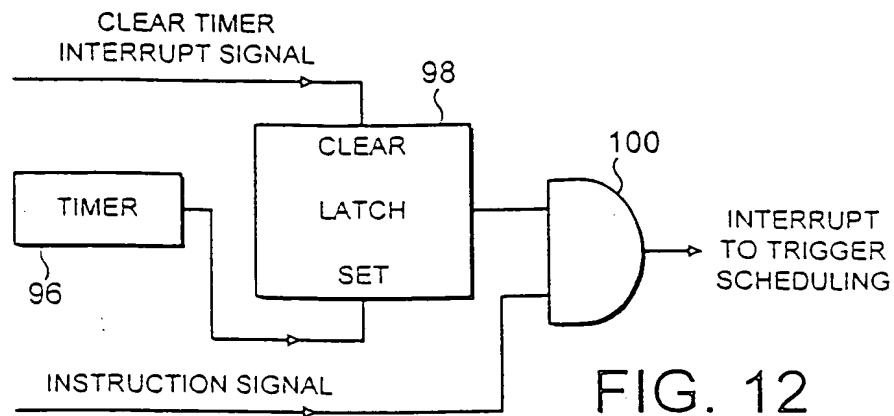


FIG. 12

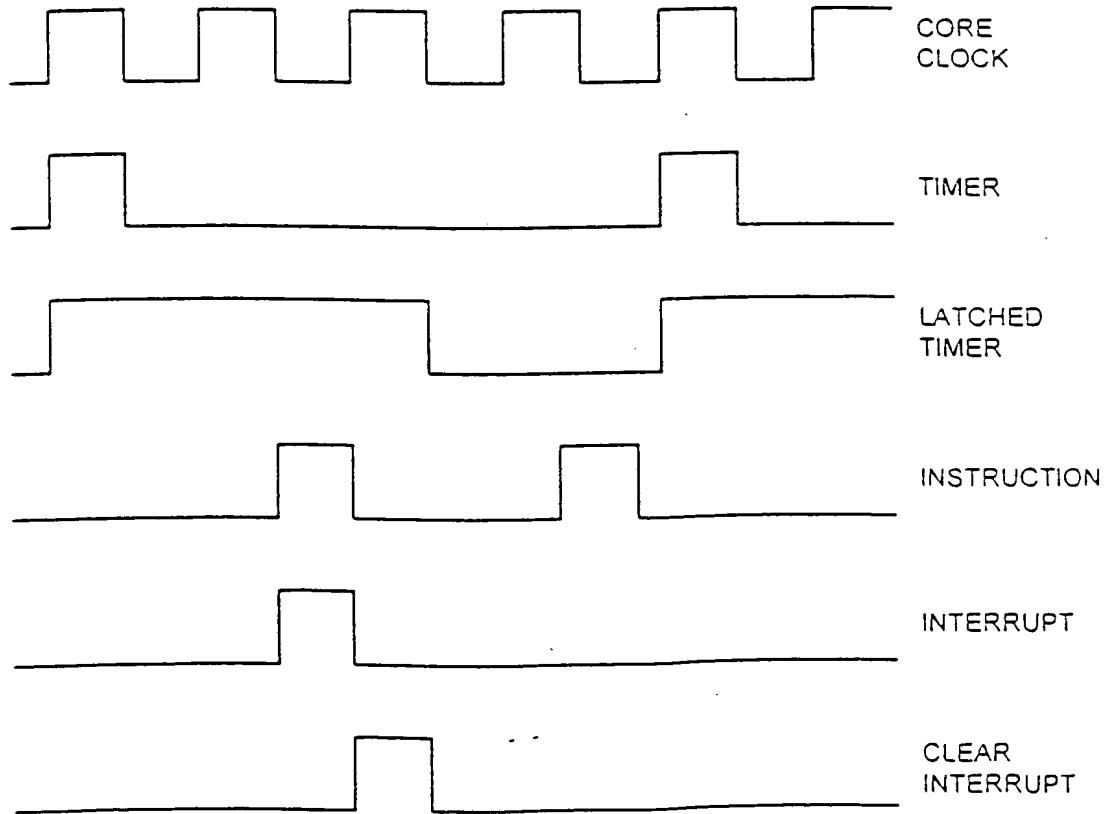


FIG. 13